

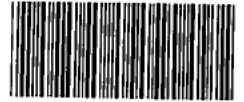
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
BUILDING 53, BOX 25227, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

Gene

TO : Thomas C. Voltaggio, Acting Director
Enforcement Division, Region III

DATE: March 13, 1981

FROM : **non responsive based on revised scope**
Deputy Director, NEIC



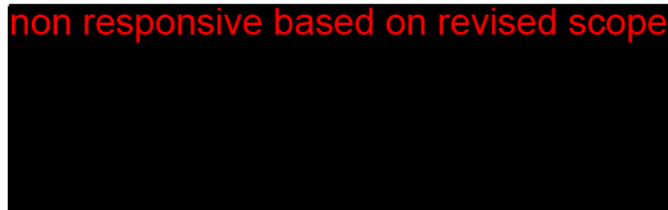
SEMS DocID 2332259

SUBJECT: Transmittal of Evidence Audit Report, Pigeon Point Landfill, New Castle
County, Delaware

The enclosed evidence audit report was prepared by the Contractor Evidence Audit Team (CEAT) located at the NEIC. The report covers chain-of-custody, document control, and evidence security procedures followed by the Region III FIT, in the conduct of the subject investigation. Please note that the CPA assigned to the CEAT has certified that, in his opinion, correct procedures were followed by the team.

Please give me a call if you should have questions or comments regarding the audit. In my absence, feel free to discuss it with Rob Laidlaw or Gerri Hilden on 234-4706.

non responsive based on revised scope



Enclosure

cc: S. L. Laskowski, Acting S&A Director (w/enclosure)
Director, NEIC (w/o enclosure)
Chief, Enforcement Specialist Office, NEIC (w/o enclosure)

ORIGINAL
(Red)

Delmarva-D.C. Section
IPP Br. **MAR 13 1981**
Received
Date



ENVIRONMENTAL CONSULTANTS INC.
3000 YOUNGFIELD ST. SUITE 2P^JAKEWOOD, COLORADO 80215
PHONE (303) 233-1248

March 5, 1981

non responsive based on revised scope [REDACTED], Project Officer
EPA National Enforcement Investigations Center
Bldg. 53, Box 25227, Denver Federal Center
Denver, CO 80225

Subject: Evidence Audit Statement, Project No. F3-8101-17, Pigeon Point
Landfill, New Castle County, Delaware

My opinion, based upon my review of the audit checklists and field logbooks completed by the CEAT during their field audit of Project Number F3-8101-17, New Castle County, Delaware, is that the chain-of-custody, document control and evidence security procedures, followed by the FIT, meet or exceed prescribed EPA procedures.

non responsive based on revised scope [REDACTED]

CPA

CPA

non responsive based on revised scope [REDACTED]

ORIGINAL
(Red)

FIELD AUDIT REPORT

Pigeon Point Landfill
New Caste County, DE

February 4 - 5, 1981

FIT - Ecology and Environment
8021 Route 130
Pennsauken, NJ 08110
(609) 665-1515

non responsive based on revised scope

[REDACTED]

- Project Coordinator
- Assistant Regional Team Manager
- Document Control Officer

Landfill Consultants to the Delaware Solid Waste Authority
Duffield Associates Consulting Geotechnical Engineers
Post Office Box 505
Newark, DE 19711
(302) 738-0703

non responsive based on revised scope

[REDACTED]

- Engineer
- Assistant

INTERA - Denver

non responsive based on revised scope

[REDACTED]

- Environmental Counsel
- Staff Consultant
- Technical Associate

ORIGINAL
(Red)

intera

On Wednesday, February 4, and Thursday February 5, 1981 an audit of field documentation control, sample handling, and chain-of-custody procedures was conducted by INTERA personnel "non responsive based on revised scope"

"non responsive based on revised scope" The Region III Field Investigation Team (FIT) was investigating the Pigeon Point landfill, operated by the Delaware Solid Waste Authority located in New Castle County, Delaware. On February 4, those present representing the FIT were "non responsive based on revised scope"

"non responsive based on revised scope", employed by Duffield Associates, were present to represent the Delaware Solid Waste Authority. On February 5, four additional FIT members were present: "non responsive based on revised scope"

"non responsive based on revised scope"

BRIEFING WITH FIELD INVESTIGATION TEAM

A briefing was held on February 4, to familiarize those present with the project plan, and to discuss those areas that the audit would address. A briefing for field participants had been held on February 3, 1981 at the FIT office.

Prior to the investigation, the FIT determined the safety conditions to be at Level D: (boots, hard hats, glasses, Tyvek suits and respirators), but after a preliminary reconnaissance, it became apparent that conditions at certain locations would necessitate a Level B Safety Plan (self-contained breathing apparatus) due to high levels of organic vapor in the ambient air. This change was documented in an amended Project Plan and was discussed with participants prior to the site visit. The FIT conducted a background information search of the site, but had not visited the landfill prior to this investigation.

ORIGINAL
(Red)

The FIT is using the EPA-prescribed sample tags and chain-of-custody forms. All samples, including blanks and duplicates, are identified according to the format contained on those documents. The project code is the Technical Direction Document (TDD) number, the station number is referred to as the sampling location (SL) number, and the station location is a narrative description of the sampling point (e.g., South Leachate Pond). Blanks and duplicate samples are identified as such on the VIAR Traffic Report (TR) forms.

[redacted] of the FIT office logs out the VIAR TR forms to the project coordinator, obtains the case number from VIAR, and the laboratory locations to which the samples will be sent. [redacted] the FIT Document Control Officer, maintains a log of the sample tags issued by the regional EPA office, and sends a monthly report to the regional Deputy Project Officer advising him of their disposition. Sample tags were logged out to A. Stone, the project coordinator, for this field investigation. Chain-of-custody forms and sample tags are not issued to field participants, but are kept by the project coordinator until used. All sample tagging was done at the command post van after collection. Sample tags and chain-of-custody forms were filled out, except for date and time, prior to the field investigation.

All field measurements and quality assurance procedures are documented in a logbook, rather than on Field Data Record Sheets. The FIT advised INTERA personnel that pH and conductivity meters are calibrated in the laboratory against known standard solutions. INTERA personnel observed the FIT recalibrate the pH meter out in the field before use against a standard acid buffer (pH = 4.01), and a standard alkaline buffer (pH = 9.01). The conductivity meter was also recalibrated out in the field against known standard salt solutions. Quality assurance checks were documented in [redacted] notebook.

The FIT explained that it tries to avoid all confidential information. If confidential information is obtained, it is turned over to the DPO as soon as possible.

The FIT stated that samples are shipped via Federal Express as soon as possible after collection. Sample integrity is maintained during shipment by the following procedure. A layer of vermiculite is placed inside the shipping container, then the sample containers are placed inside a plastic trash bag over the vermiculite layer. Finally, more vermiculite is poured around each sample container for further cushioning. The chain-of-custody and Traffic Report forms are zip-lock bagged and placed inside the shipping container which is taped closed. A custody seal is placed over the tape in such a way that the shipping container cannot be opened without breaking the custody seal.

ORIGINAL
(Red)

PROJECT STUDY PLAN

The Project Plan was received by INTERA personnel on February 4, 1981, just prior to the preliminary reconnaissance. The plan included a list of FIT personnel, a plan of operation and logistics, sampling and safety equipment required, sampling locations, the corresponding TR form and sample tag numbers, and notes on equipment decontamination procedures.

Detailed descriptions of well locations were not listed since G. Elliott of Duffield Associates provided to the FIT a map of the landfill showing the precise well locations. One composited soil sample was taken. A description of the collection point and a sketch was documented in the project coordinator's logbook. Two off-site well locations were listed in the project plan, but neither a map nor precise descriptions were provided by the FIT.

The preliminary reconnaissance could not be concluded on February 4 due to high organic vapor readings in the air surrounding well number 28 and an insufficient quantity of compressed air tanks for all personnel. and the project coordinator decided to complete the reconnaissance, and sample all sites the following day. This change in the initial Project Plan was documented with an updated plan issued to all participants on the following day.

LOGBOOKS

Each FIT member maintained his own accountable logbook with an identifying number printed on the cover. Each logbook contained entries from more than one project, but each page was project-specific. All entries were dated, and are signed only if the entry is made by someone other than the logbook owner.

ORIGINAL
(Red)

ACCOUNTABLE FIELD DOCUMENTS

The following statements are direct observations by INTERA personnel.

Each accountable document (EPA-prescribed sample tags, chain-of-custody forms) has an accountable 5-digit document number stamped on it which is recorded in the project coordinator's notebook. In addition, sample tags and chain-of-custody forms list the TDD number (TDD# F3-8101-17) on them. Each sample entry recorded on the chain-of-custody form lists the corresponding VIAR Organic and Inorganic TR numbers, as well as each sample tag number. The Organic and Inorganic TRs show the case number (393), issued by the VIAR office, for this investigation.

All sample tags and chain-of-custody forms are completely filled out prior to the actual collection (except for time and date of collection) of those samples. The sample tags remain at the command post under custody of the project coordinator until secured to a sample container. No tags were lost, destroyed or voided, and all were used during the investigation. Every sample container, including blanks, had a sample tag attached to it, and was completely filled out, including TDD number, station number, location, date, time, preservation, analyses, and signatures of samplers. Each sample was listed on a chain-of-custody form. During this investigation, samples were packed for shipping before INTERA personnel could compare information on the sample tags, TRs, and chain-of-custody forms. Errors on the chain-of-custody forms had been obliterated and INTERA personnel explained the proper procedure of error correction to the FIT. The chain-of-custody form lists the method of sample shipment and was placed along with the TRs inside the shipping container. Sample custody was maintained by the samples being in direct possession of the sampler at the sampling location or in the command post van. On two occasions samples were locked inside a vehicle's trunk. **ORIGINAL (Red)**

The vehicle keys were retained by non responsive based on revised scope and the actions logged in those members' logbooks. A receipt for the samples taken from the landfill was given to a facility representative, and a copy retained.

FIELD OBSERVATIONS

Entry permission to the facility had been obtained from [redacted] Assistant Director of the Delaware Solid Waste Authority, and was documented in the project coordinator's logbook. [redacted], on-site operator of the landfill, gave entry permission and permission to take photographs, and his response was also documented in the project coordinator's logbook. Polaroid photos were taken, and information such as time, date, description of subject and photographer were documented in the project coordinator's logbook and on each photograph.

INTERA personnel were told that the offer for split samples to the Delaware Solid Waste Authority was made by the project coordinator and was documented in a phone log kept at the FIT office. As of the date of the investigation the Delaware Solid Waste Authority had not responded to the offer of splits. At one off-site sampling location (Artesian Well Co.), the offer to split samples was accepted and documented in [redacted] logbook. A copy of the chain-of-custody form also serves as a receipt for samples. One copy of the receipt is retained by the FIT. The split sample given to the Artesian Well Co. was obtained in the presence of a company representative. The sample containers used for the splits were not tagged, labelled, or otherwise identified. At the second off-site sampling location (ICA Americas, Atlas Point Plant), the offer to split samples was refused and documented in [redacted] logbook. A receipt for samples taken by the FIT was issued to the facility and a copy retained.

Permission to take photographs at Artesian Well Co. was granted by [redacted] and his authorization, together with photograph descriptions, and other pertinent information, were recorded in [redacted] logbook.

ORIGINAL
(Red)

All samples were collected as stated in the Project Study Plan. At each sampling location, seven separate containers were filled and identified with an accountable EPA-prescribed sample tag. Four one-liter, amber glass bottles for extractable organics, one one-liter plastic bottle for inorganics (metals) preserved with nitric acid, and two 40-ml glass, septum-backed vials for volatile organics were used. One vial is a duplicate and is labeled as such. Both vials are identified and bagged as one sample and have one accountable sample tag attached to it. All of the samples specified in the Project Study Plan were collected. The composite soil sample was returned to the FIT office for special shipment as its' analysis would be performed by the National Enforcement and Investigations Center laboratory in Denver.

All of the measurements and observations specified in the Project Study Plan were taken and documented. Conductivities and pH were recorded in [REDACTED] logbook. [REDACTED]

SUMMARY

At the conclusion of the investigation a debriefing was held with the FIT in order to communicate INTERA's findings and answer specific questions. The procedure for error correction was reiterated. One additional comment made by INTERA was to include precise descriptions of sampling locations in the Project Study Plan for those sites where no maps are available.

On Tuesday, February 10, [REDACTED] held a debriefing with [REDACTED] the Regional DPO, in order to communicate INTERA's findings concerning the FIT's performance during the Pigeon Point Landfill investigation.

**ORIGINAL
(Red)**

FIELD CHECKLIST

Project No. F3-8101-17

Project Location Pigeon Point, Leeward

Date 02/04/81

FIT Team Leader
and/or

Project Co-Ordinator

Signatur

A. BRIEFING WITH FIT TEAM

Yes / No

1.) Has a project co-ordinator been appointed?

Comments

Yes ☒ No

2.) Was a project plan prepared?

Comments

Comments Plan has been revised
in light of organic vapor level.

Yes ☒ No ☐

3.) Was a briefing held for project participants?

Comments

Comments FT was briefed on
02/03/81

Yes ☒ No

4.) Were additional instructions given to project participants? (i.e. changes in project plan)

Comments

Comments Plan changed 02/04 due to safety considerations (organic vapors level high)

Yes	No
-----	----

5.) Is there a written list of sampling locations and descriptions?

Comments

Comments contained in sample plan

FIELD CHECKLIST
Briefing with FIT team

Yes ☒ No ☐

- 6.) Is there a map of sampling locations in the project plan or in the project co-ordinators' logbook?

Comments _____

Yes ☐ No ☐

- 7.) Is there a list of accountable field documents checked out to the project co-ordinator? If so, who checked them out?

Comments

Project Coordinator maintaining custody of accountable documents.

Documents checked out to P.C. by DCO.

Yes ☐ No ☒

- 8.) Is the transfer of field documents (sample tags, chain-of-custody, logbooks, etc.) from the project co-ordinator to the field participants documented in a logbook?

Comments

All tagging and labelling done by P.C. in command post. Documents not checked out to samplers.

↓
+1
to
DOC
in
P.C.
Log
B.

ORIGINAL
(Red)

B. FIELD OBSERVATIONS

Yes ☒ No ☐

- 1.) Was permission granted to enter and inspect the facility? If so, by whom?

Comments permission granted
by Pat Canzano, Delaware
Authority of Solid Waste

Yes ☐ No ☐

- 2.) Are samples collected as stated in the project plan or as directed by the project co-ordinator? (note security measures, especially on automatic samplers)

Comments _____

Yes ☐ No ☐

- 3.) Are samples collected in the type of containers specified in the project plan or as directed by the project co-ordinator?

Comments _____

Yes ☐ No ☐

- 4.) Are samples preserved as specified in the project plan or as directed by the project co-ordinator?

Comments _____

ORIGINAL
(Red)

Yes ☐ No ☐

- 5.) Are the number, frequency, and type of samples collected as specified in the project plan or as directed by the project co-ordinator?

Comments _____

Yes ☐ No ☐

- 6.) Are the number, frequency, and type of measurements and observations taken as specified in the project plan or as directed by the project co-ordinator?

Comments _____

Field Observations

Yes.

No

7.)

Comments

Yes

No

8.

Comments

ORIGINAL
(Red)

C. DOCUMENT CONTROL

Yes ☒ No ☐

1. Are document numbers on all accountable documents?

Comments _____

Yes ☐ No ☒

2. Have all unused and voided accountable documents been returned to the coordinator?

Comments no unused or voided documents

Yes ☐ No ☒

3. Have all lost or destroyed accountable documents been recorded in the project coordinator's logbook?

Comments none lost or destroyed

Yes ☒ No ☐

4. Are samples identified with sample tags?

Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐

5. Are sample tags completed? (e.g. station no., location, date, time, analyses, signatures of samplers, etc.)

Comments _____

Yes ☒ No ☐

6. Are the samples taken listed on a chain-of-custody record?

Comments _____

Yes 1 No

Comments _____

Yes 1 No

Comments _____

Yes ✓ No ✓

Comments: No other taken

Yes / No

Comments _____ ORIGINAL
(Red)

ORIGINAL
(Red)

Yes 1 No

Comments *Red Xcess*

Yes 1 No 0

Comments

FIELD CHECKLIST
DOCUMENT CONTROL

- Yes ✓ No 13. Is the sample custody maintained at all times?
Comments _____

- Yes ✓ No 14. Do the sample traffic reports agree with the sample tags?
Comments _____

- Yes ✓ No 15. Has a receipt for samples been provided to the facility?
Comments _____

- Yes ✓ No 16. Are blank and duplicate samples identified?
Comments _____ ORIGINAL
(Red)

- Yes ✓ No 17. Are logbooks signed by the individual who checked out the logbook from the project coordinator?
Comments _____

- Yes ✓ No 18. Are logbooks dated upon receipt from the project coordinator?
Comments _____

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 19. Are logbook entries dated and identified by author?

Comments _____

Yes ☒ No ☐ 20. Is the facility's approval or disapproval to take photographs noted in a logbook?

Comments _____

Yes ☒ No ☐ 21. Are photographs documented in logbooks? (e.g. time, date, description of subject, photographer, etc.)

Comments _____

Yes ☒ No ☐ 22. Are photos matched with logbook documentation?

Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐ 23. Is the offering of splits recorded?

Comments on telephone log during
conversation w/ site operator

Yes ☒ No ☒ 24. Are sample tag numbers recorded in the project coordinator's logbook?

Comments are noted in study ~~note~~ plan

FIELD CHECKLIST
DOCUMENT CONTROL

Yes, 1 No

25. Are Quality Assurance checks documented?

Comments

Documented in
"non responsive based on revised scope"

logbook

ORIGINAL
(Red)

FIELD CHECKLIST

Project No. 8101
F3-8101-17

Project Location Pidgeon Point

Date 2/4/81

FIT Team Leader Deleware
and/or non responsive based on revised scope
Project Co-Ordinator non responsive based on revised scope

Signature non responsive based on revised scope

A. BRIEFING WITH FIT TEAM

Yes ☒ No ☐ 1.) Has a project co-ordinator been appointed?

Comments _____

Yes ☒ No ☐ 2.) Was a project plan prepared?

Comments we have copy

Yes ☒ No ☐ 3.) Was a briefing held for project participants?

Comments Held day before recon.

Yes ☒ No ☐ 4.) Were additional instructions given to project participants? (i.e. changes in project plan)

Comments Changes during recon. because of safety conditions

Yes ☒ No ☐ 5.) Is there a written list of sampling locations and descriptions?

Comments I project plan

ORIGINAL
(Red)

FIELD CHECKLIST

Project No. 2101
F3-2101-17

Project Location Pidgeon Point

Date 2/4/21

FIT Team Leader Deleware
and/or
Project Co-Ordinator non responsive based on revised scope

Signature non responsive based on revised scope

A. BRIEFING WITH FIT TEAM

Yes ☒ No ☐ 1.) Has a project co-ordinator been appointed?

Comments _____

Yes ☒ No ☐ 2.) Was a project plan prepared?

Comments We have copy

Yes ☒ No ☐ 3.) Was a briefing held for project participants?

Comments Held day before recon.

ORIGINAL
(Red)

Yes ☒ No ☐ 4.) Were additional instructions given to project participants? (i.e. changes in project plan)

Comments Changes during recon. because of safety conditions.

Yes ☒ No ☐ 5.) Is there a written list of sampling locations and descriptions?

Comments I project plan

FIELD CHECKLIST
Briefing with FIT team

Yes ☒ No ☐ 6.) Is there a map of sampling locations in the project plan or in the project co-ordinators' logbook?

Comments Sketch map

Yes ☒ No ☐ 7.) Is there a list of accountable field documents checked out to the project co-ordinator? If so, who checked them out?

Comments Checked out to Alan by

non responsive based on revised scope

Maureen's list of ^{THIS} and various other checks

11/28/98 Susan, etc. GFC is not checked out

Yes ☐ No ☒ 8.) Is the transfer of field documents (sample tags, chain-of-custody, logbooks, etc.) from the project co-ordinator to the field participants documented in a logbook?

Comments Project co-ordinator maintains custody of
documents & field fills chain of

ORIGINAL
(Red)

B. FIELD OBSERVATIONS

Yes / No

1.)

Was permission granted to enter and inspect the facility? If so, by whom?

Comments Access granted by director of Delaware solid waste
for K... and ... of the ...

Yes ✓ / No

2.)

Are samples collected as stated in the project plan or as directed by the project co-ordinator? (note security measures, especially on automatic samplers)

Comments

Yes ✓ / No

3.)

Are samples collected in the type of containers specified in the project plan or as directed by the project co-ordinator?

Comments

Yes ✓ / No

4.)

Are samples preserved as specified in the project plan or as directed by the project co-ordinator?

Comments No preservatives except HNO₃ in one
plastic container per sample site.

Yes ✓ / No

5.)

Are the number, frequency, and type of samples collected as specified in the project plan or as directed by the project co-ordinator?

Comments As specified in project plan **ORIGINAL**
(Red)

Yes ✓ / No

6.)

Are the number, frequency, and type of measurements and observations taken as specified in the project plan or as directed by the project co-ordinator?

Comments

FIELD CHECKLIST

Field Observations

Yes No ✓ 7.)

Are field measurements recorded in logbooks or Field Data Records (FDR)? (i.e. pH, temp., conductivity, etc.)

Comments None taken

Yes ✓ No 8.

Are samples packed for preservation as per the sample plan?

Comments No preservation noted in
project plan

ORIGINAL
(Red)

C. DOCUMENT CONTROL

Yes ☒ No ☐

1. Are document numbers on all accountable documents?

Comments _____

Yes ☐ No ☒

2. Have all unused and voided accountable documents been returned to the coordinator?

Comments Never checked out

Yes ☐ No ☒

3. Have all lost or destroyed accountable documents been recorded in the project coordinator's logbook?

Comments Never checked out

Yes ☒ No ☐

4. Are samples identified with sample tags?

Comments Tagged at every station

Yes ☒ No ☐

5. Are sample tags completed? (e.g. station no., location, date, time, analyses, signatures of samplers, etc.)

Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐

6. Are the samples taken listed on a chain-of-custody record?

Comments _____

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 7.

Are the sample tag numbers recorded on the chain-of-custody documents?

Comments _____

Yes ☒ No ☐ 8.

Does information on sample tags and chain-of-custody records match?

Comments _____

Yes ☒ No ☐ 9.

Are splits documented?

Comments Splits have been offered and when the
lab's analyst decides what they want to do, it
will be recorded in the logbook, given before at off-site
location

Yes ☐ No ☒ 10.

Are sample tag serial numbers for split samples recorded? (e.g. in logbook, on a chain-of-custody record or on a sample receipt form)

Comments No sample tags on split samples

Yes ☒ No ☐ 11.

Does the chain-of-custody record indicate the method of sample shipment?

Comments Federal Express

ORIGINAL
(Red)

Yes ☒ No ☐ 12.

Is the chain-of-custody record included with the samples?

Comments Placed in plastic zip-lock bag with
Traffic Reports.

FIELD CHECKLIST
DOCUMENT CONTROL

- Yes ☒ No ☐ 13. Is the sample custody maintained at all times?
Comments _____

- Yes ☒ No ☐ 14. Do the sample traffic reports agree with the sample tags?
Comments _____

- Yes ☒ No ☐ 15. Has a receipt for samples been provided to the facility?
Comments _____

- Yes ☒ No ☐ 16. Are blank and duplicate samples identified?
Comments Sample tag indicates it as a blank

- Yes ☐ No ☒ 17. Are logbooks signed by the individual who checked out the logbook from the project coordinator?
Comments But have name on them and
identifying number

ORIGINAL
(Red)
- Yes ☐ No ☒ 18. Are logbooks dated upon receipt from the project coordinator?
Comments One logbook used for several
projects

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 13. Is the sample custody maintained at all times?

Comments _____

Yes ☒ No ☐ 14. Do the sample traffic reports agree with the sample tags?

Comments _____

Yes ☒ No ☐ 15. Has a receipt for samples been provided to the facility?

Comments _____

Yes ☒ No ☐ 16. Are blank and duplicate samples identified?

Comments Sample tag indicates it as a blank

Yes ☐ No ☒ 17. Are logbooks signed by the individual who checked out the logbook from the project coordinator?

Comments But have name on them and

identifying cover

ORIGINAL
(Red)

Yes ☐ No ☒ 18. Are logbooks dated upon receipt from the project coordinator?

Comments Our logbook used for several
projects

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 19.

Are logbook entries dated and identified by author?

Comments Other individuals may make entries and they
do not date their entries

Yes ☒ No ☐ 20.

Is the facility's approval or disapproval to take photographs noted in a logbook?

Comments Noted in Alans logbook

Yes ☒ No ☐ 21.

Are photographs documented in logbooks? (e.g. time, date, description of subject, photographer, etc.)

Comments All above info recorded

Yes ☒ No ☐ 22.

Are photos matched with logbook documentation?

Comments Polaroids taken

Yes ☒ No ☐ 23.

Is the offering of splits recorded?

Comments

ORIGINAL
(Red)

Yes ☒ No ☐ 24.

Are sample tag numbers recorded in the project coordinator's logbook?

Comments In Alans log book

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☒ 25.

Are Quality Assurance checks documented?

Comments In Gregg's logbook

ORIGINAL
(Red)

FIELD CHECKLIST

Project No. F3-8101-17

Project Location PIGEON POINT, DE

Date Feb. 4, 1981

FIT Team Leader
and/or

Project Co-Ordinator

non responsive based on revised scope

non responsive based on revised scope

Signature

A. BRIEFING WITH FIT TEAM

Yes ☒ No ☐ 1.)

Has a project co-ordinator been appointed?

Comments non responsive based on revised scope

Yes ☒ No ☐ 2.)

Was a project plan prepared?

Comments We have a copy of the plan

Yes ☒ No ☐ 3.)

Was a briefing held for project participants?

Comments on 02/03/81

ORIGINAL
(Red)

Yes ☒ No ☐ 4.)

Were additional instructions given to project participants? (i.e. changes in project plan)

Comments project plan was changed due to unforeseen safety hazards (i.e. OVA > 30 ppm in the field)

Yes ☒ No ☐ 5.)

Is there a written list of sampling locations and descriptions?

Comments Written list available but without descriptions of precise locations. Site blueprints available thru Safford Assoc. with precise well locations

FIELD CHECKLIST
Briefing with FIT team

Yes ☒ No ☐

- 6.) ☒ Is there a map of sampling locations in the project plan or in the project co-ordinators' logbook?

Comments Map included in project plan. We have a copy. Blueprints provided by [redacted] of Daffield Assoc. RE or 11/87

Yes ☒ No ☐

- 7.) ☒ Is there a list of accountable field documents checked out to the project co-ordinator? If so, who checked them out?

Comments T.R.'s checked out by [redacted]

Sample tags checked out by [redacted]

Chain-of-custody doc's are not accounted for

Yes ☒ No ☐

- 8.) ☒ Is the transfer of field documents (sample tags, chain-of-custody, logbooks, etc.) from the project co-ordinator to the field participants documented in a logbook?

Comments field doc's remain @ command

post-do not go with field participants - only project coordinator has logbook

ORIGINAL
(Red)

Yes ☒ No ☐

- 1.) ✓ Was permission granted to enter and inspect the facility? If so, by whom?

Comments from [redacted] - DE Author.
of S.W. Asst. Director

Yes ☒ No ☐

- 2.) ✓ Are samples collected as stated in the project plan or as directed by the project co-ordinator? (note security measures, especially on automatic samplers)

Comments _____

Yes ☒ No ☐

- 3.) ✓ Are samples collected in the type of containers specified in the project plan or as directed by the project co-ordinator?

Comments _____

Yes ☒ No ☐

- 4.) ✓ Are samples preserved as specified in the project plan or as directed by the project co-ordinator?

Comments _____

Yes ☒ No ☐

- 5.) ✓ Are the number, frequency, and type of samples collected as specified in the project plan or as directed by the project co-ordinator?

Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐

- 6.) ✓ Are the number, frequency, and type of measurements and observations taken as specified in the project plan or as directed by the project co-ordinator?

Comments _____

FIELD CHECKLIST

Field Observations

Yes ☒ No ☐

7.) / Are field measurements recorded in logbooks or Field Data Records (FDR)? (i.e. pH, temp., conductivity, etc.)

Comments _____

Yes ☒ No ☐

8.) / Are samples packed for preservation as per the sample plan?

Comments _____

ORIGINAL
(Red)

C. DOCUMENT CONTROL

Yes ☒ No ☐ 1. ✓ Are document numbers on all accountable documents?
Comments _____

02/05/81
JEP

Yes ☒ No ☒ 2. ✓ Have all unused and voided accountable documents been returned to the coordinator?

Comments all used - none voided

02/05/81
JEP

Yes ☒ No ☒ 3. ✓ Have all lost or destroyed accountable documents been recorded in the project coordinator's logbook?

Comments none lost or destroyed

Yes ☒ No ☐ 4. ✓ Are samples identified with sample tags?

Comments _____

Yes ☒ No ☐ 5. ✓ Are sample tags completed? (e.g. station no., location, date, time, analyses, signatures of samplers, etc.)

Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐ 6. ✓ Are the samples taken listed on a chain-of-custody record?

Comments _____

Yes ☒ No ☐ 7. ✓

Are the sample tag numbers recorded on the chain-of-custody documents?

Comments _____

_____Yes ☒ No ☐ 8. ✓

Does information on sample tags and chain-of-custody records match?

Comments _____

_____Yes ☒ No ☐ 9. ✓

Are splits documented?

Comments _____

_____Yes ☒ No ☐ 10. ✓

Are sample tag serial numbers for split samples recorded? (e.g. in logbook, on a chain-of-custody record or on a sample receipt form)

Comments _____

_____**ORIGINAL**
(Red)Yes ☒ No ☐ 11. ✓

Does the chain-of-custody record indicate the method of sample shipment?

Comments _____

_____Yes ☒ No ☐ 12. ✓

Is the chain-of-custody record included with the samples?

Comments _____

Yes ☒ No ☐ 13. ✓

Is the sample custody maintained at all times?
Comments _____

Yes ☒ No ☐ 14. ✓

Do the sample traffic reports agree with the sample tags?
Comments _____

Yes ☒ No ☐ 15. ✓

Has a receipt for samples been provided to the facility?
Comments _____

Yes ☒ No ☐ 16. ✓

Are blank and duplicate samples identified?
Comments _____

Yes ☒ No ☐ 17. ✓

Are logbooks signed by the individual who checked out the logbook from the project coordinator?
Comments _____

ORIGINAL
(Red)

Yes ☒ No ☐ 18. ✓

Are logbooks dated upon receipt from the project coordinator?
Comments _____

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 19. ☒ Are logbook entries dated and identified by author?

Comments _____

Yes ☒ No ☐ 20. ☒ Is the facility's approval or disapproval to take photographs noted in a logbook?

Comments _____

Yes ☒ No ☐ 21. ☒ Are photographs documented in logbooks? (e.g. time, date, description of subject, photographer, etc.)

Comments _____

Yes ☒ No ☐ 22. ☒ Are photos matched with logbook documentation?

Comments _____

Yes ☒ No ☐ 23. ☒ Is the offering of splits recorded?

ORIGINAL
(Red)

Comments *Phone log records not offer -
answer has not been received as of
02/04/81 1330*

Yes ☒ No ☐ 24. ☒ Are sample tag numbers recorded in the project coordinator's logbook?

Comments _____

FIELD CHECKLIST
DOCUMENT CONTROL

Yes ☒ No ☐ 25. ☒ Are Quality Assurance checks documented?

Comments _____

ORIGINAL
(Red)

EVIDENCE AUDIT DOCUMENT CHECKLIST

DE-FB-8101-17-8-81-032

Project No. F3-8101-17

Project Location Pigeon Point Delaware

Team E & E

FIT

Date Thursday Feb 5, 1981

Signature

non responsive based on revised scope

Document Type	Document No.	Is the document signed	Is the document dated	Are recordings in ink	Are errors properly corrected	Are all blanks completed	Remarks
Sample tag	3-1253	yes	yes	yes	NO ERRORS	yes	PP C-0410 MC-8168
Sample tag	3-1256	yes	yes	yes	NO ERRORS	yes	PP/VO C-0410 MC-8168
Sample tag	3-1254	yes	yes	yes	NO ERRORS	yes	PP C-0410 MC-8168
Sample tag	3-1255	yes	yes	yes	NO ERRORS	yes	PP C-0410 MC-8168
Sample tag	3-1257	yes	yes	yes	NO ERRORS	yes	PP C-0410 MC-8168
Sample tag	3-1293	yes	yes	yes	NO - tag written today	NO TIME	PP MC-8168 Blank
Sample tag	3-1294	yes	yes	yes	NO ERRORS	NO TIME	PP/VO Blank
Sample tag	3-1289	yes	yes	yes	NO ERRORS	NO TIME	PP Blank
Sample tag	3-1291	yes	yes	yes	NO ERRORS	NO TIME	PP Blank
Sample tag	3-1290	yes	yes	yes	NO ERRORS	NO TIME	PP Blank
Sample tag	3-1203	yes	yes	yes	NO ERRORS	yes	PP MC-8166 C-0408
Sample tag	3-1243	yes	yes	yes	NO - Proper Code & written	yes	PP C-0409 MC-8167
Sample tag	3-1244	yes	yes	yes	NO ERRORS	yes	PP MC-8166 C-0408
Sample tag	3-1295	yes	yes	yes	NO ERRORS	yes	PP MC-8166 C-0408
Sample tag	3-1202	yes	yes	yes	NO ERRORS	yes	PP MC-8166 C-0408
Sample tag	3-1204	yes	yes	yes	NO ERRORS	yes	PP/VO MC-8166 C-0408

ORIGINAL (Ref)

STAT Team

Signature _____

[illegible]

INTERDIVISION ROUTE SLIP

DATE: 3/18

TO:	INFO	ACTION
3SA00 <u>DIRECTOR</u>		
3SA00 <u>DEPUTY DIRECTOR</u>		
3SA10 <u>WESTERN REG. LAB. & ENV. CTR.</u>		
3SA20 <u>CENTRAL REGIONAL LAB</u>		
3SA30 <u>ENVIRONMENTAL EMERGENCY BR.</u>		
3SA40 <u>AIR QUALITY MONITORING BR.</u>		
3SA60 <u>WATER QUALITY MONITORING BR.</u>		

ATTN: _____

Prepare for signature of 

Return for file _____

Circulate _____

Remarks:

**ORIGINAL
(Red)**

RECEIVED FEB

MAR 19 1981

FROM: OFFICE OF THE DIRECTOR
SURVEILLANCE AND ANALYSIS DIVISION (3SA00)